

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. This listing includes no changes to the claims most recently presented.

Listing of Claims:

1.(Previously Presented) A method of controlling the transmission power in a cellular radio system comprising terminals, base stations, and radio network controllers, and where transmission power control comprises an outer loop control, wherein a radio network controller provides a base station with transmission power controlling information, and a closed-loop control, wherein a base station and a terminal control the transmission power according to said controlling information, and which cellular radio system further comprises a load control, wherein a radio network controller monitors and balances the use of radio resources in the base stations that operate under it, characterized in that to control the transmission power in a macrodiversity connection where a given branch goes between the serving radio network controller and the terminal through the drift radio network controller and the drift base station, it comprises the steps of:

① transmitting information limiting the transmission power in said macrodiversity connection branch from the drift radio network controller to the serving radio network controller,

② transmitting the information controlling the transmission power of said macrodiversity connection branch from the serving radio network controller to the drift radio network controller, and

③ transmitting information controlling the transmission power of said macrodiversity connection branch from the drift radio network controller to the drift base station.

2.(Previously Presented) A method according to claim 1, characterized in that for transmitting the information controlling the transmission power of said macrodiversity connection branch from the serving radio network controller to the drift radio network controller a special data transmission form, meant for data transmission between radio network controllers, is used whereupon the transformation into a data transmission form between a radio network controller and a base station takes place in the drift radio network controller.

3.(Previously Presented) A method according to claim 1, characterized in that said information limiting the transmission power in said macrodiversity connection branch comprises the downlink transmission power minimum and maximum, as well as the uplink E_b/N_0 ratio target value minimum and maximum.

4.(Previously Presented) A method according to claim 1, characterized in that said information controlling the transmission power in said macrodiversity connection branch comprises the downlink transmission power minimum and maximum and the uplink E_b/N_0 ratio target value.

5.(Previously Presented) A method according to claim 1, characterized in that the information limiting the transmission power in said macrodiversity connection branch is transmitted therein from the drift radio network controller to the serving radio network controller as response to an observation of a change in the load made by the drift radio network controller.

6.(Previously Presented) A radio network controller for controlling the operation of base stations in a cellular radio system comprising terminals, base stations, and radio network controllers, which radio network controller comprises means for establishing information, according to outer-loop control, controlling the transmission power and for transmitting it to a base station, and means for controlling the load by monitoring and balancing the use of radio resources in the base stations which operate under it, characterized in that

(a) for operating as a serving radio network controller, to control the transmission power in a macrodiversity connection, a given branch of which goes between that radio network controller and a terminal through a drift radio network controller and a drift base station, it comprises:

means for establishing information controlling the transmission power in said macrodiversity connection branch based on information limiting the transmission power received from said drift radio network controller, and means for transmitting the established information to said drift radio network controller; and

(b) for operating as a drift radio network controller, to control the transmission power in a macrodiversity connection, a given branch of which goes between a serving radio network controller and a terminal through that radio network controller and a drift base station, it comprises:

means for establishing information limiting the transmission power in said macrodiversity connection branch and for transmitting it to the serving radio network controller, and

means for establishing information controlling the transmission power of the drift base station on the basis of controlling information received from the serving radio network controller and means for transmitting it to the drift base station.

7.(Previously Presented) A cellular radio system comprising terminals, base stations, and radio network controllers and comprising, in at least two radio network controllers, means for establishing information, according to outer-loop control, controlling the transmission power and for transmitting it to a base station, and means for controlling the load by monitoring and balancing the use of radio resources in the base stations that operate under it, characterized in that to control the transmission power in a macrodiversity connection, a given branch of which goes between the first radio network controller and the terminal through the second radio network controller and the base station, it comprises,

in the second radio network controller, means for establishing information limiting the transmission power and for transmitting it to the first radio network controller,

in the first radio network controller, means for establishing information controlling the transmission power and for transmitting it to the second radio network controller, and

in the second radio network controller, means for establishing information controlling the transmission power of the base station on the basis of the controlling information received from the first radio network controller and for transmitting it to the base station.

8.(Previously Presented) A method of changing the connection parameters in a cellular radio system comprising terminals, base stations, and radio network controllers, and where at least one terminal is in a macrodiversity connection, wherein at least one diversity branch goes between the serving radio network controller and the terminal through the drift radio network controller and the drift base station and which further comprises a load control wherein the radio network controller monitors and balances the use of radio resources-in the base stations that operate under it, and a call control wherein the serving radio network controller sets and changes the connection parameters of its connections, being characterized in that it comprises

observing that the drift radio network controller load control demands a change in the connection parameters of the terminal which is communicating through the base station that operates under it, and

controlling the serving radio network controller to change the connection parameters of said terminal.

9.(Previously Presented) A cellular radio system comprising terminals, base stations and radio network controllers and which comprises, in at least two radio network controllers, means for controlling the calls, means for controlling the load by monitoring and balancing the use of radio resources in the base stations that operate under it, characterized in that to control a call in a macrodiversity connection, a given branch of which goes between the first radio network controller and the terminal through the second radio network controller and the base station, it comprises, in the second radio network controller, means for observing the need to change connection parameters, resulting from load control, and for transmitting the information to the first radio network controller.

Appl. No. 09/622,240
Response Dated March 10, 2004
Reply to Office Action of December 15, 2003

10.(Previously Presented) A system according to claim 9, characterized in that it further comprises, in the first radio network controller, means for changing the call connection parameters.